LG
Life's Good

Owner's Manual

DLP PROJECTOR

Please read the safety information carefully before using this product.

PH300
PH300W

www.lg.com

LICENSES

Supported licenses may differ by model. For more information about licenses, visit www.lg.com.

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that has passed rigorous testing to verify that it plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

DivX Certified® to play DivX® video up to HD 1080p, including premium content.

DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.

Covered by one or more of the following U.S. patents:

7,295,673; 7,460,668; 7,515,710; 7,519,274

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

This device meets the EMC requirements for home appliances (Class B) and is intended for home usage. This device can be used in all regions.

NOTE

- Image shown may differ from your projector.
- Your projector's OSD (On Screen Display) may differ slightly from that shown in this manual.

SAFETY PRECAUTIONS

Please take note of safety instructions to prevent any potential accident or misuse of the product.

- Safety precautions are given in two forms, i.e. **WARNING** and **CAUTION.** **WARNING** and **CAUTION** are understood to mean as follows:
  - **WARNING**: Failure to follow the instructions may cause serious injury and even death
  - **CAUTION**: Failure to follow the instructions may cause minor injury to people or damage to the product
- Read the owner's manual carefully and keep it handy for future reference.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING/CAUTION

– TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

Read these instructions.
Keep these instructions.
Heed all warnings.
Follow all instructions.

Indoor Installation

WARNING

- Do not use the projector outside and do not expose the product to any humidity or water.
  – Since the product is not waterproof, this may result in a fire or electric shock.
- Do not place the projector in direct sunlight or near heat sources such as radiators, fires, stoves, etc.
  – This may result in fire.

- Do not place flammable materials such as aerosols near the projector.
  - This may result in fire.
- Do not allow children to cling to or climb up to the projector.
  - This may cause the projector to fall, causing injury or death.
- Do not install the product in a place with no ventilation (e.g., on a bookshelf or in a closet) or on a carpet or cushion.
  - This may result in fire due to the increase in internal temperature.
- Do not place the product close to sources of steam, oil or oil mist, such as humidifiers and kitchen counters.
  - Failure to do so may result in fire, electric shock, or corrosion.
- Do not install the product onto a wall or ceiling that is close to sources of oil or oil mist.
  - The product may be damaged and fall, resulting in serious injury.
- Do not place the projector where it might be exposed to dust.
  - This may result in fire.
- Do not use the projector in a damp place such as a bathroom where it is likely to get wet.
  - This may result in fire or electric shock.
- Do not allow a tablecloth or curtain to block the air vent.
  - This may result in fire due to the increase in the internal temperature.
- Ensure good ventilation around the projector. The distance between the projector and the wall should be at least 30 cm.
  - This will prevent fire due to the increase in the internal temperature.

⚠ CAUTION

- When placing the projector on a table or shelf, be careful not to put it near the edge.
  - The projector could fall due to balance problems, which may cause personal injury or damage to the product. Make sure to use the projector cabinet or stand that fits the projector.
- When moving the projector, make sure to switch it off and remove the power plug and cords.
  - The power cord may be damaged, resulting in fire or electric shock.
- Do not place the projector on an unstable or vibrating surface such as a wobbly shelf or a slope.
  - It may fall and cause injury.

- Be careful not to tip the projector over when connecting external devices to the projector.
  - This may cause personal injury or damage to the projector.

Power

⚠ WARNING

- The appliance coupler is used as the disconnect device.
  - Please make sure the device is installed near the wall outlet to which it is connected and that the outlet is easily accessible.
- The grounding wire should be connected.
  - Ensure that you connect the grounding cable to avoid electric shock.If it is not possible to ground the unit, have a qualified electrician install a separate circuit breaker. Do not try to ground the projector by connecting it to telephone wires, lightning rods or gas pipes.
- The power plug should be inserted fully into the power outlet.
  - An unstable connection may cause a fire.
- Do not place heavy objects on the power cord.
  - This may result in fire or electric shock.
- Never touch the power plug with wet hands.
  - This may result in electric shock.
- Do not plug too many devices into one multi-power outlet.
  - This may result in fire due to the power outlet overheating.
- Prevent dust from collecting on the power plug pins or outlet.
  - This may result in fire.
- To turn off the main power, remove the power plug, which should be positioned so it is easy to access for operation.

⚠ CAUTION

- Hold the plug firmly when unplugging.
  - A damaged wire may create a fire hazard.
- Ensure the power cord and plug are not damaged, modified, severely bent, twisted, pulled, sandwiched or hot. Do not use the product if the power outlet is loose.
  - This may result in fire or electric shock.
- Keep the power cord away from heating devices.
  - The wire's sheath may melt, which may result in fire or electric shock.

- Place the projector where people will not trip over or tread on the power cord to protect the power cord and plug from any damage.
  - This may result in fire or electric shock.
- Do not turn the projector on or off by plugging in the power plug or unplugging it from the wall outlet.
  (Do not use the power plug as a switch.)
  - This may result in electric shock or damage to the product.
- Do not insert a conductor into the other side of the wall outlet while the power plug is inserted into the wall outlet. In addition, do not touch the power plug immediately after it is disconnected from the wall outlet.
  - This may result in electric shock.
- Only use the official power cord provided by LG Electronics. Do not use other power cords.
  - This may result in fire or electric shock.

When in Use

⚠ WARNING

- Do not place anything containing liquid on top of the projector such as a vase, flower pot, cup, cosmetics, or medicine; or ornaments, candles, etc.
  - This may result in fire or electric shock, or cause injury due to falling.
- In the event that there is a heavy impact or the cabinet is damaged, switch it off, unplug it from the power outlet and contact an authorized service center.
  - This may result in electric shock.
- Do not insert pieces of metal such as coins, hairpins or metal debris, nor flammable materials such as paper or matches into the projector.
  - This is to prevent electric shock or fire.
- In the event that liquid or a foreign object falls into the projector, switch it off and unplug it from the power outlet and contact our service center.
  - This may result in fire or electric shock.
- Make sure that a child does not swallow the batteries when you replace the old remote control batteries with new ones. Keep batteries out of reach of children.
  - If a child swallows a battery, consult a doctor immediately.

- Never open any cover on the projector.
  - There is a high risk of electric shock.
- Do not look directly into the lens when the projector is in use.
  - The bright light may damage your eyes.
- When the lamp is on or has just been turned off, avoid touching the air vent or lamp, because these will be very hot.
- If there is a gas leak in the room with the projector, do not touch the projector or power outlet. Open the windows for ventilation.
  - Sparks may cause fire or burns.
- Never touch the product or power cord during storms with thunder or lightning.
  - This may cause electric shock.
- Do not use the projector near electronic devices that generate a strong magnetic field.
- Keep the plastic film used for packaging the product out of the reach of children.
  - If not handled safely, it can cause suffocation.
- Do not keep your hand on the projector for a long time when it is running.
- When you play a game by connecting a game console to a projector, it is recommended that you maintain a distance of more than four times the diagonal length of the screen.
  - Make sure that the connecting cable is long enough. Otherwise, the product may fall causing personal injury or damage to the product.
- Do not place the projector or its remote control with battery in an extremely high temperature environment.
  - This may result in fire.

⚠ CAUTION

- Do not place heavy objects on the projector.
  - It may fall down and cause personal injury.
- Be careful not to allow any impact to the lens during transport.
- Do not touch the lens of the projector.
  - The lens may be damaged.
- Do not use any sharp tools on the projector, such as a knife or hammer, because this may damage the casing.
- In the event that no image appears on the screen or no sound is heard, stop using the projector. Switch off the projector, unplug it from the power outlet and contact our service center.
  - This may result in fire or electric shock.

- Do not drop anything onto the projector or allow anything to impact the projector.
  - This may cause personal injury or the projector to malfunction.
- It is recommended that you maintain a distance of more than 5 - 7 times the diagonal length of the screen.
  - If you watch the screen at a close distance for a long time, your eye sight may become worse.
- Do not block the light beam emitted from the projector using a book or other object.
  - Lengthy exposure to the projector beam may result in fire. In addition, the lens may be overheated and damaged by the reflected heat.
- Do not start the projector with the volume turned up high.
  - High volume may damage hearing.
- Do not use high voltage electrical equipment near the projector, (e.g. bug zapper).
  - This may result in product malfunction.

Cleaning

⚠ WARNING

- Do not spray water directly to the projector when cleaning. Do not allow water to get into the product or do not allow it to get wet.
  - This may result in fire or electric shock.
- When there is smoke or a strange smell coming out from the projector or a foreign object falls into the projector, switch it off and unplug it from the power outlet and contact our service center.
  - Otherwise, this may result in fire or electric shock.
- Use an air spray or soft cloth or cotton swab moistened with a lens cleaning chemical or alcohol to remove dust or stains from the front projection lens.

⚠ CAUTION

- Contact the sales representative or service center for internal cleaning of the projector about once a year.
  - If you do not clean the projector, dust will accumulate inside and may create a fire hazard or malfunction.

- When cleaning plastic parts, such as the projector case, disconnect the product from the power first and wipe with a soft cloth. Do not spray with water or wipe with a wet cloth. Never use glass cleaner, automobile or industrial shiner, abrasives or wax, benzene, alcohol, etc. when cleaning plastic parts, such as the projector case as they can damage the product.
  - This may also create a fire hazard, result in electric shock or product damage (deformation, corrosion or breakage).
- Remove the plug from the outlet before cleaning the product.
  - Otherwise, this may result in electric shock.

Others

⚠ WARNING

- When you go out, place the projector out of reach of animals, and remove the power plug from the wall outlet.
  - Using a damaged power cord may result in short circuit or fire.
- Do not use the projector near high-precision electronic devices or those that transmit weak radio signal.
  - This may affect the operation of the product, causing an accident.
- Only a qualified technician can disassemble or modify the projector. For diagnosis, adjustment, or repair, contact your seller or our service center.
  - This may result in fire or electric shock.
- Do not stare directly into lens when in operation, eye damage can occur.
- No user serviceable parts inside unit. High voltage parts can cause shock and even electrocution.
- Proper ventilation required, do not block airflow around unit. Doing so can cause injury and internal overheating.
- To prevent damage to lamp, unit must remain plugged in for approximately 3 minutes after power down to allow for proper cool down (not applicable on LED models).
- Do not touch the lens; doing so can result in burns or damage to lens. Lens and unit may be HOT during and immediately after use. Use caution when handling unit, allowing for proper cool down.
- Only use a grounded electrical outlet.
- Do not insert anything into or cover up the exhaust vents.
  - This may result in fire or electric shock.
- Follow all maintenance guidelines for optimal use; service only at an authorized service center.

- Lamp contains mercury and as such must be disposed of according to local, state and federal laws (not applicable on LED models).
- Keep it out of reach of children.
  - Failure to do so may result in personal injury and damage to the product.

⚠ CAUTION

- Do not use or store the projector outdoors for long periods of time.
- Be sure to unplug if the projector is not to be used for a long period.
  - Accumulated dust may result in fire or electric shock due to overheating, ignition, or poor insulation.
- Only use the specified type of battery.
  - Burst or leaking batteries may result in damage or injury.
- Make sure you use the same type of batteries for replacement.
  - Otherwise, the battery may discharge early and the remote control may not work properly due to a bad connection.
- The battery contains lithium-ion, so it must be handled with care.
  - This may result in explosion or fire.
- Dispose of used batteries properly.
  - This may result in explosion or fire. The correct method of disposal may vary depending on your country or region. Dispose of the battery pack as instructed.
- Do not throw or disassemble the battery.
  - This may result in fire or explosion due to damage to the battery.
- Always use batteries approved and certified by LG Electronics.
  - This will prevent damage or fire.
- Store batteries away from metallic objects, such as keys and paper clips.
  - Excess current may cause a rapid increase in temperature, resulting in fire or burns.
- Do not store the batteries near any heat source, such as a heater.
  - This may result in fire or damage to the product.

- Do not store batteries at temperatures higher than 60 °C or in high humidity.
  - This may result in explosion or fire.
- Make sure that the battery is connected correctly.
  - This prevent explosion or fire.
- Incorrect battery replacement may cause fire.
- Make sure you use the same type of battery for replacement. (Battery type: CR2032 / 3 V)
  - In the event of a battery contact failure, the battery may drain quickly or the remote control may not work properly.

Antenna

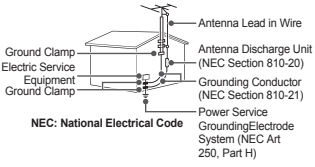
⚠ WARNING

- If you are using an outdoor antenna, please install it away from electrical wires to make sure it does not touch any nearby wires even when it falls down due to heavy wind.
- Failure to do so may cause electric shock or physical injury.

⚠ CAUTION

- To prevent any raindrops flow into the product, bend the outdoor antenna wire where it comes indoors.
- Raindrops flowing into the product may cause fire or electric shock.

Antenna grounding according to the National Electrical Code, ANSI/NFPA 70



For USA

NOTE TO CABLE/TV INSTALLER

This reminder is provided to call the CATV system installer's attention to Article 820 - 40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

USA

Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or projector reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/projector technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference, and
2) this device must accept any interference received, including interference that may cause undesired operation of the device.

CAUTION : Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Risk Group 2

CAUTION Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

CONTENTS

LICENSES 2

SAFETY PRECAUTIONS 4

PREPARATION 17

Accessories 17
Optional Extras 18
Parts and Components 19
- Main Unit 19
- Back 20

Installation 21
- Installation Precautions 21
- Projection Distance per Screen Size 22
- How to Install the Projector On a Tripod 23
- Kensington Security System 24

REMOTE CONTROL 25

USING THE PROJECTOR 27

Connecting the Antenna or Cable 27
Using the battery 28
Battery using time information 28
Watching Projector 30
- Turning the Projector On 30
- Focus of the Screen Image 30
- Using the projector 31

Setting Channel 32
- Saving Currently Broadcasting Channel 32

Additional Options 35
- Adjusting Aspect Ratio 35
- Using the Keystone Function 36
- Changing input device 36
- Blank Function 37

Using the Quick Menu 38

MY MEDIA 39

Before Using 39
- Connecting a USB Device 39
- Removing a USB Device 39

To Use My Media 41
- Watching the Videos 43
- Viewing the Photos 49
- Listening to Music 52
- Viewing Files 55

CUSTOMIZING SETTINGS 59

SETTINGS 59
PICTURE Settings 60
AUDIO Settings 65
CHANNEL Settings 67
TIME Settings 68
INFORMATION 69
LOCK Settings 70
OPTION 1 Settings 74
OPTION 2 Settings 76

CONNECTING DEVICES 78

Connecting HD Receiver, DVD Player, or VCR Player 79
– HDMI Connection 79
Connecting Headphones 80
Using the Mirroring Function of a Mobile Phone 81
– MHL/Slimport Connection 81

MAINTENANCE 82

Cleaning 82
– Cleaning the Lens 82
– Cleaning the Projector Case 82

SPECIFICATIONS 83

PREPARATION

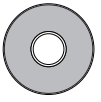
The pictures may differ slightly from the actual product.

Accessories

Accessories included with the project are show below.
Accessories are subject to change without prior notice.
New accessories may be added or old ones removed.

Remote Control,
Lithium Battery (CR2032 / 3 V)
(See page 25)

Owner's Manual



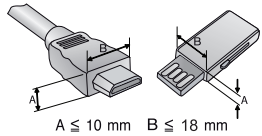
Owner's Manual CD

AC-DC Adaptor

Power cord

HDMI cable

- When connecting an HDMI or USB cable, or connecting a USB flash drive to the HDMI or USB port, use a product that has a width of 18 mm or less and a height of 10 mm or less. If the USB cable or USB flash drive does not fit the USB ports of the projector, use an extension cable that supports USB 2.0.



- Use a certified cable with the HDMI logo attached.
- If you do not use a certified HDMI cable, the screen may not display or a connection error may occur. (Recommended HDMI cable types)
  - High-Speed HDMI®/™ Cable
  - High-Speed HDMI®/™ Cable with Ethernet

Optional Extras

To purchase optional accessories, visit an electronics store or online shopping site or contact the retail store where you purchased the product. Optional accessories are subject to change without prior notice.

Projection Screen

Tripod

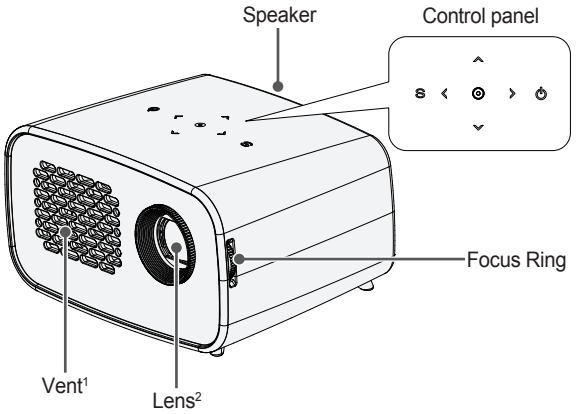
MHL or Slimport Cable

RF Cable

Parts and Components

This projector is manufactured using high-precision technology. You may, however, see tiny black dots and/or bright colored dots (red, blue or green) that continuously appear on the projector screen. This is a normal result of the manufacturing process and does not indicate a malfunction.

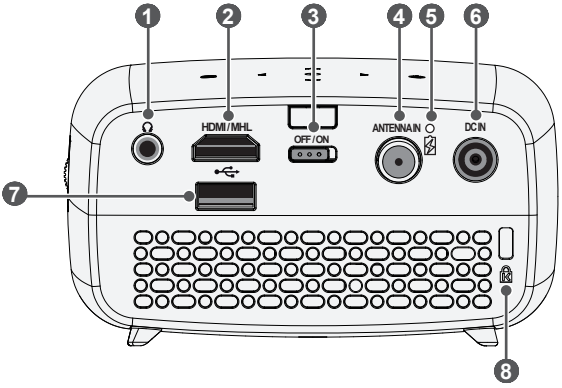
Main Unit



Button	Description
(POWER)	Turns the projector on or off.
(SETTINGS)	Displays or closes the Settings menu.
, (CHANNEL)	Changes the TV channel.
, (VOLUME)	Adjusts the volume level.
, , ,	Sets the function or moves the cursor.
(OK)	Shows the current mode and saves changes to the settings.

1 Due to the high temperature of vent area, do not get close to the vent area.
2 Do not touch the lens when using the projector. The lens may be damaged.

Back

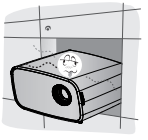


No.	Description
1	(Headphone Port)
2	HDMI/MHL Port
3	OFF/ON Switch – OFF: Turns the projector off completely. – ON: Turns the projector on and the projector goes into Standby mode. Place the switch to Off when you move the projector or when you intend not to use the projector for long periods of time.
4	ANTENNA IN Port
5	Battery Charge Indicator – Red: Charging – Green: Charging complete
6	DC IN Port
7	(USB port)
8	Kensington security system connector

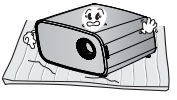
Installation

Installation Precautions

- Place the projector in a well-ventilated environment.
  - To prevent internal overheating, install the projector in a well-ventilated place.
    Do not place anything near the projector. That may block its air vents. If the air vents are blocked, the internal temperature of the projector will increase.

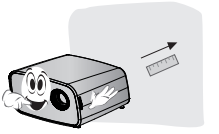


  - Do not place the projector on a carpet or rug. If the projector's inlet vent is on the bottom, be careful not to block the vent and always use the projector on a solid, level surface.



  - Be sure to prevent foreign objects such as paper debris from entering the projector.

  - Leave an adequate open area (30 cm or more) around the projector.



- Do not install the projector in a hot or humid environment.
  - Only install the projector in a place of moderate temperature and low humidity.
- Do not install the projector in a place where it can attract dust.
  - There is a risk of fire.
- Never open any cover on the projector. There is a high risk of electric shock.
- This projector is manufactured using high-precision technology. You may, however, see tiny black dots and/or bright colored dots that continuously appear on the projector screen.
  This is a normal result of the manufacturing process and does not indicate a malfunction.
- The remote control may not work in an environment where a lamp equipped with electronic ballasts or a three-wavelength fluorescent lamp is installed. Replace the lamp with an international standard lamp for the remote control to work normally.

Projection Distance per Screen Size

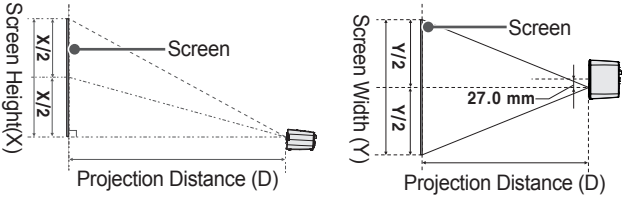
1 Place the projector on a sturdy, level surface, together with the computer or audio/video source.

2 Place the projector an appropriate distance away from the screen. The distance between the projector and the screen determines the actual size of the image.

3 Position the projector so that the lens is at a right angle to the screen. If the lens is not perpendicular to the screen, the projected image will appear distorted. To correct the distortion, use the Keystone function. (See page 36)

4 Connect the power cords of the projector and the connected devices to the wall outlet.

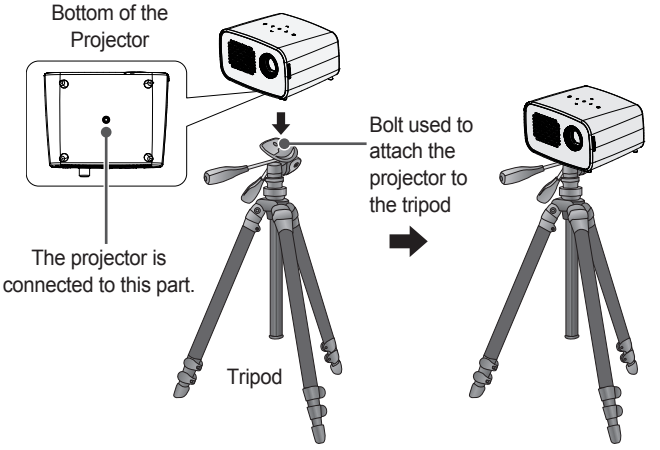
Ratio of upward projection: 100 %



16:9 Aspect Ratio			
Screen Size (mm)	**Screen Width (Y) (mm)**	**Screen Height (X) (mm)**	**Projection Distance (D) (mm)**
508	443	249	742
635	553	311	931
762	664	374	1119
889	775	436	1308
1016	886	498	1497
1143	996	560	1686
1270	1107	623	1875
1397	1218	685	2063
1524	1328	747	2252
1651	1439	809	2441
1778	1550	872	2630
1905	1660	934	2818
2032	1771	996	3007
2159	1882	1058	3196
2286	1992	1121	3385
2413	2103	1183	3574
2540	2214	1245	3762

How to Install the Projector On a Tripod

- You can install the projector using a camera tripod.
- As shown below, you can mount the projector instead of a camera on the tripod.
- When stabilizing the tripod, we recommend using a locking bolt of standard size 4.5 mm or less. The maximum size allowed for the locking bolt is 5.5 mm. (If it is longer than the maximum allowed size, it may damage the projector.)

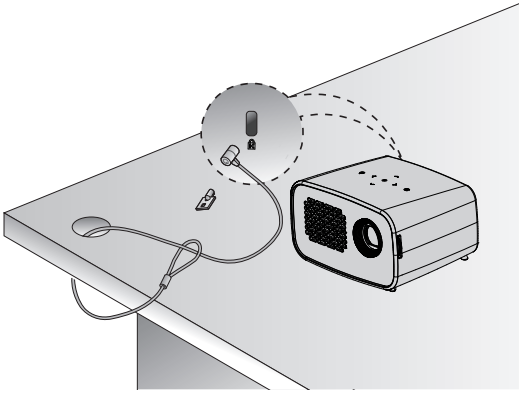


CAUTION

- If you are using a tripod, be careful not to apply external force to the tripod. Doing so may damage the projector.
- Do not place the tripod on an unstable surface.
- Be sure to use a tripod with a maximum load capacity of 3 kg or more.
- To use the projector safely, position the tripod legs so that they are as wide and stable as possible and be sure to securely attach the projector to the tripod.

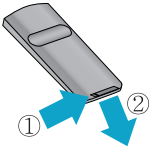
Kensington Security System

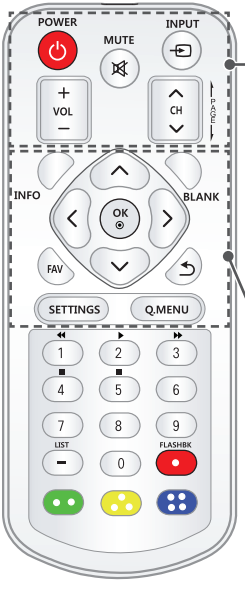
- This projector has a Kensington Security Standard connector as an anti-theft mechanism. Connect a Kensington Security System cable as shown below.
- For more information on installation and use of the Kensington Security System, refer to the user's guide provided with the Kensington Security System.
- The Kensington Security System is an optional accessory.
- What is Kensington?
  Kensington is a company that provides safety systems for laptops and other electronic devices.
  Website: http://www.kensington.com



REMOTE CONTROL

Open the lid at the back of the remote control and insert the batteries as described in the ⊕⊖ instructions. Use new batteries.





POWER
Turns the projector on or off.

MUTE
Mutes the sound of the projector.

INPUT
Changes the input source.

VOL +, -
Adjusts the volume level.

CH ,
Changes the channel or page.

PAGE
Moves to the previous/next page.

INFO
Views the information of the current program and screen.

BLANK
Turns the projector screen on or off.

Up/Down/Left/Right buttons
Sets the function or moves the cursor.

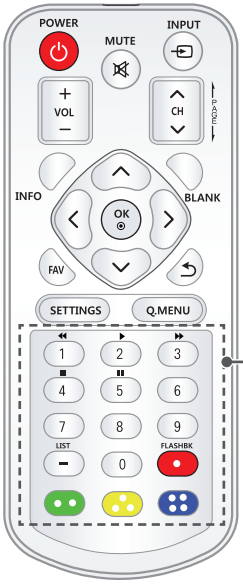
OK
Shows the current mode and saves changes to the settings.

FAV
Accesses your favorite channel.

Returns to the previous screen.

SETTINGS
Displays or closes the Settings menu.

Q.MENU
Enters the quick menu.



Number buttons

Enter a number.

Playback Control Buttons

Controls playback of **MY MEDIA**.

LIST

Accesses the saved channel list.

- (Dash)

Inserts a dash between numbers such as 2 - 1 and 2 - 2.

FLASHBK

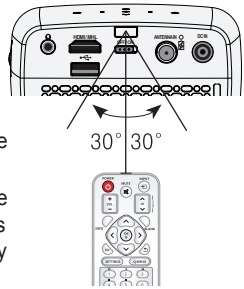
Tunes to the last channel viewed.

Color buttons

Sets detailed settings or gesture for each menu.

NOTE

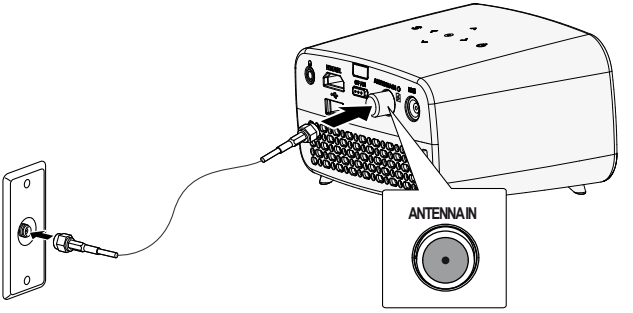
- When using the remote control, the optimal operation range is 3 meters or less (left/right) and within a 30 degree arc of the remote control IR receiver.
- For seamless operation, do not block the IR receiver.
- When you carry the remote control in the portable bag, make sure that the buttons on the remote control are not pressed by the projector, cables, documents or any other accessories in the bag. Otherwise, it may significantly reduce the battery life.



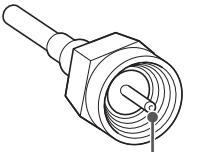
USING THE PROJECTOR

Connecting the Antenna or Cable

To watch TV using an indoor/outdoor antenna, connect a wall terminal and the **ANTENNA IN** port of the projector using an RF cable (75 Ω).
You can watch public TV or cable (analog, digital) TV. (The RF cable is sold separately.)

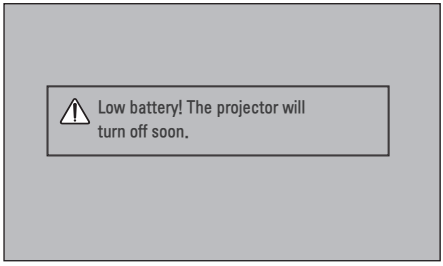


NOTE



- Make sure not to bend the copper wire of the RF cable (75 Ω). Turn the input jack to the right to fasten it.
- Ensure you use a standard coaxial cable (75 Ω, sold separately) when connecting to the projector input.
- For better image quality in locations where signal strength is low, purchase and install a signal amplifier (booster).
- A signal splitter is required if you want to use two or more projectors through one antenna.
- If you have any problems when installing the antenna, please consult a suitable retailer or the store where you purchased the antenna.

Using the battery



- It is displayed when the battery is running out.
- As your battery is low, Projector will be turned off in a minute.
- If the screen shows a low battery message, be sure to charge the battery.

Battery using time information

Status	Time and Display
Charging	About 3 hours
Usage Hours	Up to 2.5 hours (Available battery using time up to 2.5 hours when Energy Saving mode set to Max. Changing the Energy Saving mode default values will reduce battery life.)
Battery Level Indicator	

- If you intend not to use the projector for long periods of time, it is recommended to have the battery charged at 40 % to 50 %.
- The battery is automatically recharged when the projector is connected to a power supply.
- Charge the battery fully when you first use the projector.
- The battery standard usage time given in the manual is based on measurements taken by LG; the actual time may vary depending upon usage.
- Battery usage time may vary depending on broadcast type, operating temperature, period of use, and user preferences.
- As the battery is consumable, its lifetime gradually decreases. When the battery's life is reduced by half, replace it with a new battery from an LG Electronics customer center.
- Do not charge the battery using any equipment other than that supplied with the product. This may damage the battery or cause a fire.
- Always use a battery that is approved and certified by LG Electronics, Inc. Failure to do so may result in an explosion or fire.
- If the battery is leaking or giving off an odor, discontinue its use immediately and contact LG Electronics Customer Support Center.
- The battery contains lithium-ion, so please handle with care. Failure to do so may result in an explosion or fire.

Watching Projector

Turning the Projector On

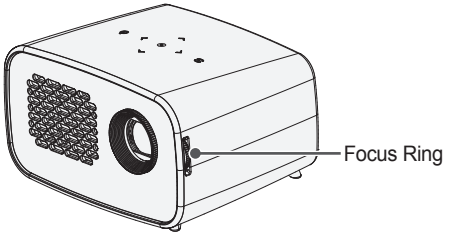
The menu screen display in this owner's manual is an example to help users understand how to operate the product and may look different from the actual screen.

1. Connect the power cord correctly to turn the projector on.
2. Place the **OFF/ON** switch on the rear port area to **ON** and press the **POWER** button on the control panel or on the remote control. (If the switch is placed to **OFF,** the projector will not turn on.)
3. On the Language and Time Zone Selection screen, select the language and Time Zone you want.
4. Select the input signal you want using the **INPUT** button on the remote control.

Focus of the Screen Image

When an image appears on the screen, check if it is in focus and fits the screen properly.

To adjust the focus of the image, rotate the focus ring.



Using the projector

1 When in standby mode, press the **POWER** button to turn the projector on.

2 Press the **INPUT** button and select the input signal you want.

3 Control the projector using the following buttons while watching the screen.

Button	Description
CH ∧ ,∨	Changes the TV channel.
LIST	Displays the channel list.
0 - 9	Enters a channel number.
VOL +, -	Adjusts the volume level.
MUTE	Mutes the sound from the projector.
Q.MENU	Enters the quick menu. (See page 38)
FLASHBK	Displays the channel you were watching previously.

4 To turn the projector off, press the **POWER** button.

Setting Channel

Image shown may differ from your projector.

Saving Currently Broadcasting Channel

Using the Auto Tuning function

Saves a channel which is currently broadcasting. Be sure to activate **Auto Tuning** when you move to a new home or change the position of your projector. When you activate this function, make sure that the antenna is connected and there are channels broadcasting signals.

1. Press the **SETTINGS** button.
2. Press the ∧, ∨, <, or > button to select **CHANNEL** and press the **OK** button.
3. Press the ∧, ∨ button to select **Auto Tuning** and press the **OK** button.
4. Select **Start** to start auto tuning. The projector scans and saves available channels automatically.
5. When you are finished, press the **SETTINGS** button.

Saving or Deleting Channels Manually

1. Press the **SETTINGS** button.
2. Press the ∧, ∨, <, or > button to select **CHANNEL** and press the **OK** button.
3. Press the ∧, ∨ button to select **Manual Tuning** and press the **OK** button.
4. Scroll through the channel types, and then add or delete channels.
5. When you are finished, press the **SETTINGS** button.

NOTE

- If **Lock System** is turned on, a pop-up window will appear asking for password.
- You can store up to 1000 channels. The number of channels that you can store differs depending on the broadcasting signal environment.
- **Auto Tuning** memorizes the channels that are currently being broadcast.
- The channels are stored in the order of DTV, TV, Cable DTV and Cable TV.

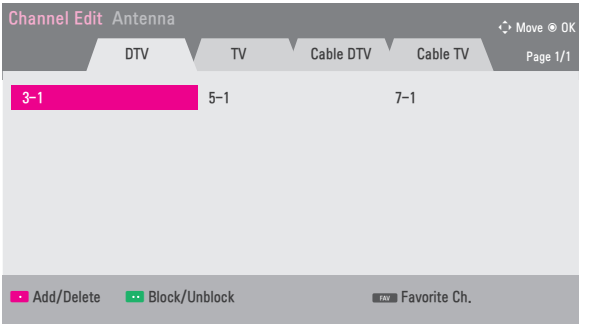
Editing Your Channel List

1 Press the **SETTINGS** button.

2 Press the ∧, ∨, <, or > button to select **CHANNEL** and press the **OK** button.

3 Press the ∧, ∨ button to select **Channel Edit** and press the **OK** button.

4 Edit a channel by using the buttons below.

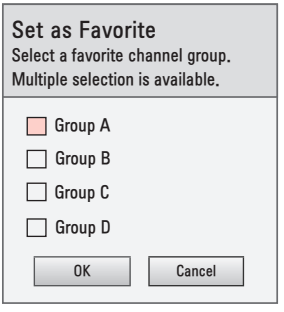


Button	Description
Red	Adds or deletes a channel.
Green	Block or unblock a channel.
FAV	Adds a favorite channel.

5 When you are finished, press the **SETTINGS** button.

Favorite Channel Setup

1. Press the **SETTINGS** button.
2. Press the ∧, ∨, <, or > button to select **CHANNEL** and press the **OK** button.
3. Press the ∧, ∨ button to select **Channel Edit** and press the **OK** button.
4. Move to your desired channel.
5. Press the **FAV** button to access the **Set as Favorite**.
6. Press the ∧, ∨ buttons to to scrolls through channel group.
7. Press the **OK** button.



Additional Options

Adjusting Aspect Ratio

1 Press the **Q.MENU** button.

2 Press the <, > buttons to select **Aspect Ratio** and press the **OK** button.

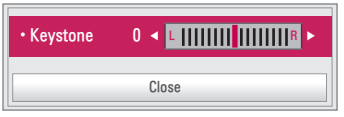
Menu	Description
16:9	Resizes images to the 16:9 ratio.
Just Scan	Displays video images in the original size without removing parts of the edge of the image. • If you select **Just Scan**, you may see image noises at the edge or edges of the screen.
Set By Program	Displays images in the same aspect ratio as the original image.
4:3	Resizes images to the previous standard 4:3.
Zoom	Resizes the image to fit the screen width. The top and bottom parts of the image may be cut off. • Press the < or > button to zoom in or out of the image. • Press the ∧ or ∨ button to move the image.
Cinema Zoom 1	Formats an image to the cinemascope ratio, 2.35:1. It ranges from 1 to 16. • Press the < or > button to zoom in or out of the image. • Press the ∧ or ∨ button to move the image. • If you enlarge or reduce an image, the image may be distorted.

NOTE

- Available picture size may differ depending on the input signal.
- You can also use the **SETTINGS** button.

Using the Keystone Function

To prevent the screen image from becoming trapezoidal, **Keystone** adjusts the top and bottom width of the image if the projector is not set up at a right angle to the screen.
Because the **Keystone** function may cause inferior screen image quality, use this function only when it is not possible to set up the projector at an optimal angle.



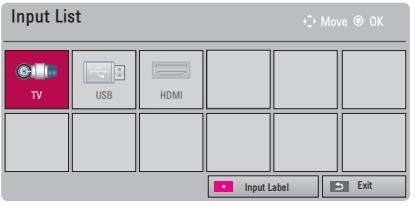
1. Press the **SETTINGS** button.
2. Use the ∧, ∨, <, or > buttons to select **OPTION 2** and press the **OK** button.
3. Use the ∧ or ∨ buttons to select **Keystone** and press the **OK** button.
4. Use the < or > buttons to adjust Keystone.
5. **Keystone** can be adjusted from **-40** to **40**.
6. Press the **OK** button when finished.

Changing input device

To select an external input

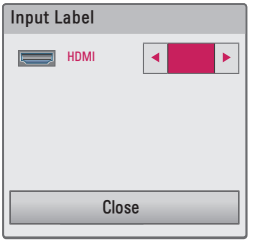
You can select inputs connected to the projector.

- Press the **INPUT** button on the remote control to display the input selection screen.
  - Connected inputs are displayed first.
- Select an input signal using the remote control's **INPUT** button to connect the projector to the desired input.
  You can use the < or > button to switch between all the input modes.



Selecting an Input Label

Displays which devices are connected to which input ports.



1 Press the **INPUT** button on the remote control to display the input selection screen.
2 Use the **Red** button.
3 Use the < or > button to select one of the input labels.

Blank Function

Using the Blank Function

This function may be effective when you need to draw attention during a meeting or training.

1 Press the **BLANK** button, and the screen is covered by the background color. You can change the background color by referring to "Selecting the background color of the blank image".
2 Press any button to clear the blank function. To cover the screen temporarily, press the **BLANK** button on the remote control. Do not block the lens with any object while the projector is running. It may become overheated and deformed or even cause a fire.

Selecting the background color of the blank image

1 Press the **SETTINGS** button.
2 Press the ∧, ∨, <, or > buttons to select **OPTION 2** and press the **OK** button.
3 Press the ∧, ∨ buttons to select **Blank Image** and press the **OK** button.
4 Press the ∧ or ∨ button to move to the setting or option you want and press the **OK** button.

Using the Quick Menu

You can easily customize your frequently used menus.

1 Press the **Q.MENU** button.
2 Press the < or > button to select a menu and press **OK** button.

Menu	Description
Aspect Ratio	Resizes the picture.
PJT Mode	Turns the projected image upside down or flips it horizontally.
Picture Mode	Changes the picture mode.
Multi Audio	Sets **MONO** or **STEREO**, or a language for a bilingual broadcast (Digital signal).
SAP	Changes the MTS sound (Analog signal).
Sleep Timer	Sets the projector to be turned off at the specified time.
Clear Voice II	Makes the voice from the projector crisp and clear.
Del/Add	Can delete or add channels.
USB Device	Allows you to remove a connected USB device in a safe manner. (The menu is displayed only when the USB device is connected.)

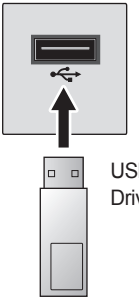
3 Press the ∧, ∨ button to scroll through the following menus.

MY MEDIA

Before Using

Connecting a USB Device

Connect a USB device (external HDD, USB memory) to the USB port of projector to enjoy the content files stored in the USB device with your projector. You cannot write or delete data in the USB device. Connect a USB flash drive as shown below.



Removing a USB Device

1. Press the **Q.MENU** button.
2. Use the < or > button to move to **USB Device** and press the **OK** button.
3. Select a USB to remove. Wait for confirmation that the USB device has stopped before removing the USB.

NOTE

- If detached early, an error may occur on the projector or the USB storage device.
- Once a USB device has been selected for removal, it can no longer be read. Remove the USB storage device and then re-connect it.

Tips for using a USB device

- If the USB storage device has a built-in auto recognition program or uses its own driver, it may not work.
- Some USB storage devices may not work or may work incorrectly.
- If you use a USB extension cable, the USB device may not be recognized or may not work properly.
- Use only USB storage devices formatted with the Windows FAT32 or NTFS file system.
- For external USB HDDs, it is recommended that you use devices with a rated voltage of less than 5 V and a rated current of less than 500 mA.
- It is recommended to use a USB hub or hard disk drive with power supplied. (If the power supplied is not enough, the USB storage device may not be detected properly.)
- It is recommended that you use USB flash drives of 32 GB or less and USB HDDs of 1 TB or less.
- If a USB HDD with power-saving function does not work properly, turn the power off and on. For more information, refer to the user manual of the USB HDD.
- Data in USB storage device can be damaged so be sure to back up important files to other devices. Data maintenance is the user's responsibility and the manufacturer is not responsible for data loss.

To Use My Media

1 Press the **SETTINGS** button on the remote control.

2 Select **MY MEDIA**.

Select desired file from the list. Watch the chosen file.

Sets play related settings by checking option during disk playback.

My Media supporting file

- Maximum data transmission rate: 20 Mbps (Mega bit per second)
- External supported subtitle formats:*.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0), *.ass, *.ssa,*.txt (TMPlayer), *.psb (PowerDivX)
- Internal supported subtitle formats: SRT/ASS/SSA (Supports internal subtitles generated from DivX6)

Video Supported Codec

Maximum resolution: 1920 x 1080 @ 30p
(only Motion JPEG 640 x 480 @ 30p)

Extension	Codec	
.asf, .wmv	Video	VC-1 Advanced Profile, VC-1 Simple and Main Profiles
	Audio	WMA Standard, WMA 9 Professional
.divx, .avi	Video	DivX3.11, DivX4, DivX5, DivX6, XVID, H.264/AVC
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital
.mp4, .m4v, .mov	Video	H.264 / AVC, MPEG-4 Part 2
	Audio	AAC
.mkv	Video	H.264 / AVC
	Audio	HE-AAC, Dolby Digital
.ts, .trp, .tp, .mts, .m2ts	Video	H.264 / AVC, MPEG-2, VC-1
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
.mpg	Video	MPEG-1
	Audio	MPEG-1 Layer I, II

Supported audio files

File Format	Item	Info
MP3	Bit rate	32 Kbps to 320 Kbps
	Sampling Rate	32 kHz to 48 kHz
AC3	Bit rate	32 kbps to 640 kbps
	Sampling Rate	32 kHz, 44.1 kHz, 48 kHz
MPEG	Bit rate	32 kbps to 448 kbps
	Sampling Rate	32 kHz to 48 kHz
AAC, HEAAC	Bit rate	24 kbps to 3844 kbps
	Sampling Rate	8 kHz to 96 kHz
CDDA	Bit rate	1.44 Kbps
	Sampling Rate	44.1 kHz
LPCM	Bit rate	1.41 Mbps to 9.6 Mbps
	Sampling Rate	Multi Channel: 44.1 kHz, 88.2 kHz / 48 kHz, 96 kHz Stereo: 176.4 kHz, 192 kHz

Watching the Videos

In the **Movie List**, you can watch movies stored on the connected USB device.
Controls playback and sets options while viewing videos.

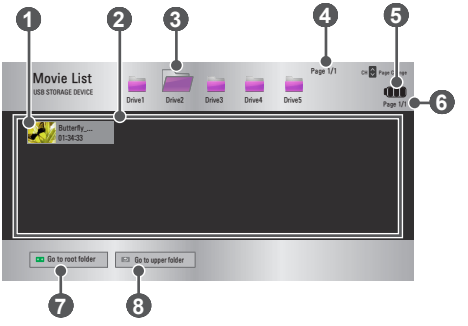
Tips for Playing Video Files

- Some subtitles created by users may not work properly.
- The video and subtitle files should be placed in the same folder. For subtitles to display correctly, the video and subtitle files must have the same name.
- We do not support any stream that contains GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation).
- Only H.264 / AVC profile level 4.1 and lower is supported.
- Video files that exceed 50 GB (gigabyte) are not supported for playback. The file size limit is dependent on the encoding environment.
- DTS audio codec is not supported.

Browsing Movie List

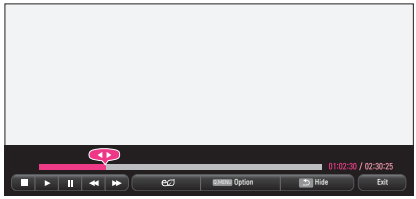
Play a video file stored from a connected device.

1. Connect a USB device.
2. Press the **SETTINGS** button.
3. Move to **MY MEDIA**.
4. Use the <, or > button to select **Movie List** and press the **OK** button.
5. Use the ∧, ∨, <, or > button to select the file you want and press the **OK** button.



No.	Description	
❶	Thumbnails	
	Abnormal file	
	File not supported	
❷	File List	
❸	Moves to the upper level folder.	
❹	Current page/Total no. of folder pages	
❺	Displays the remaining battery life.	
❻	Current page/Total no. of file pages	
❼	Moves to the top level folder.	
❽	Moves to the upper level folder.	

6 Control playback by using the following buttons.



Item	Description
◀▶	Shows the current playing position. Use <, > buttons to move forward or backward.
■	Stops playing and returns to Movie List.
▶	Returns to normal playback.

Item	Description
⏸	Pauses the media player. If no button is pressed on the remote control for 10 minutes after pausing, the playback is restarted.
	⏸▶▶ Displays in slow motion.
◀◀ ▶▶	Whenever this button is pressed, the playback speed is changed.: x2, x4, x8, x16, x32
eco	You can use the Energy Saving mode.
Option	A pop-up window will appear.
Hide	Hides the playback bar. Press the **OK** button to make it appear.
Exit	Returns to the Movie List screen.

Options for Movie List

1 Press the **Q.MENU** button.
2 Use the ∧ or ∨ button to move to a desired option and press the **OK** button.
3 Use the ∧, ∨, <, or > button to set up each item.

Set Video Play.

Item	Description
Picture Size	Selects the size of a playback screen. • **Full**: Files are played in full screen mode according to the aspect ratio of video. • **Original**: Displays the video in the original size.
Audio Language	Allows you to select the language you want for the file with multiple audio tracks. This option is not available if the file has only one audio track.

Item	Description
Subtitle Language	The subtitle can be turned on or off. • **Language**: One of any of the available languages can be selected. • **Code Page**: A character set used for a subtitle can be selected. By default, the subtitle is displayed in a language configured in **OPTION 1** → **Language**. – **Sync**: If a subtitle is not synchronized with its video, you can adjust its speed at 0.5 seconds unit. – **Position**: Moves the location of a subtitle. – **Size**: Changes the subtitle font size.
Repeat	Turns the repeat function **On** or **Off**. When it is set to off, the next file can be played sequentially if the file name is similar.

Subtitle Language

Subtitle Language	Language
Latin1	English, Spanish, French, German, Italian, Swedish, Finnish, Dutch, Portuguese, Danish, Romanian, Norwegian, Albanian, Gaelic, Welsh, Irish, Catalan, Valencian
Latin2	Bosnian, Polish, Croatian, Czech, Slovak, Slovenian, Serbian, Hungarian
Latin4	Estonian, Latvian, Lithuanian
Cyrillic	Bulgarian, Macedonian, Russian, Ukranian, Kazakh
Greek	Greek
Turkish	Turkish
Hebrew	Modern Hebrew
Chinese	Simplified Chinese
Korean	Korean
Arabic	Arabic

Set Video.

You can change video settings. (Refer to "PICTURE Settings" on page 60.)

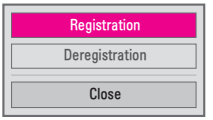
Set Audio.

You can change audio settings. (Refer to "AUDIO Settings" on page 65.)

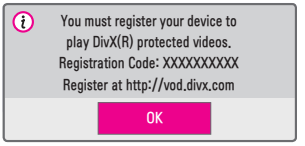
Registering the DivX code

Checks DivX Reg. Code for replaying DivX protected videos. Register at http://vod.divx.com.
Use Reg. Code to rent or purchase movies at www.divx.com/vod.

1 In the Settings menu, move to **OPTION 1** and press **DivX(R) VOD**.



2 Press the ∧ or ∨ button to move to **Registration** and press the **OK** button.



3 Check the DivX **Registration Code**.

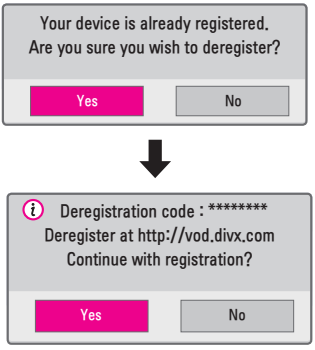
NOTE

- Rented/purchased DivX files cannot be played if the DivX Registration Code of a different device is used. Use only the DivX Registration Code granted to this specific device.
- Converted files not conforming to the DivX Codec Standard may not play or may produce abnormal sound.

To deregister the DivX code

Use the DivX deregistration code to deactivate the DivX DRM function.

1. In the Settings menu, move to **OPTION 1** and press **DivX(R) VOD**.
2. Use the ∧ or ∨ button to go to **Deregistration** and press the **OK** button.
3. Select **Yes**.



NOTE

- What is DRM [Digital Rights Management]?
  DRM technologies and services protect the interests and rights of copyright holders by preventing illegal use of digital content. Files can be played after the license is verified through an online method, etc.

Viewing the Photos

You can view photos stored on a connected device.

Supported Photo Files

PHOTO (*.JPEG)

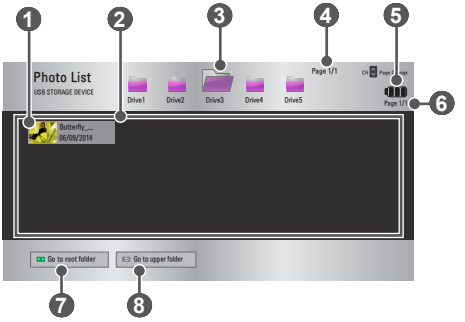
Baseline: 64-pixel (width) x 64-pixel (height) - 15360-pixel (width) x 8640-pixel (height)

Progressive: 64-pixel (width) x 64-pixel (height) - 1920-pixel (width) x 1440-pixel (height)

- Only JPEG files are supported.
- Non-supported files are displayed in the form of an icon.
- An error message is displayed for corrupted files or file formats that cannot be played.
- Corrupted files may not be displayed properly.
- It may take some time to view high-resolution images in full screen.

Browsing Photo List

1. Connect a USB device.
2. Press the **SETTINGS** button.
3. Move to **MY MEDIA**.
4. Use the <, or > buttons to select **Photo List** and press the **OK** button.
5. Use the ∧, ∨, <, or > button to select the file you want and press the **OK** button.



No.	Description	
❶	Thumbnails	
	Abnormal file	
	File not supported	
❷	File List	
❸	Moves to the upper level folder.	
❹	Current page/Total no. of folder pages	
❺	Displays the remaining battery life.	
❻	Current page/Total no. of file pages	
❼	Moves to the top level folder.	
❽	Moves to the upper level folder.	

6 Control playback by using the following buttons.

Item	Description
◀ ▶	Selects the previous or next photo.
Slideshow	All photos are displayed during slide show. • Set **Slide Speed** in the **Option** → **Set Photo View.** menu.
BGM	You can listen to music while viewing photos in full size. Set the **BGM** in **Option** → **Set Photo View.** menu.

Item	Description
	Rotates photos. • Rotates a photo 90°, 180°, 270°, 360° clockwise. • Photos cannot be rotated if their width is greater than the height of the max. supported resolution.
	Views the photo in full mode or original mode. Press the **blue** button to enlarge the image.
	You can use the **Energy Saving** mode.
Option	A pop-up window will appear.
Hide	Hides the menu on the full size screen. • To see the menu, press the **OK** button on the remote control.
Exit	Exit from full screen photo view.

Options for Photo List

1 Press the **Q.MENU** button.

2 Use the ∧ or ∨ button to move to a desired option and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up each item.

Set Photo View.

Item	Description
Slide speed	Selects a slideshow speed.
BGM	Selects a music folder for the background music. • You cannot change the music folder while the background music is playing. • For background music, only the folder from the same device can be selected. – **Repeat**: Selects repeat play. – **Random**: Selects random play.

Set Video.
You can change video settings. (Refer to "PICTURE Settings" on page 60.)

Set Audio.
You can change audio settings. (Refer to "AUDIO Settings" on page 65.)

Listening to Music

You can play audio files stored on the connected device.

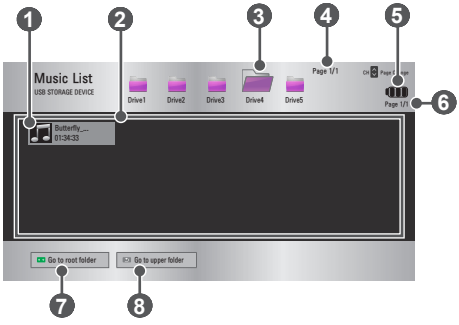
Supported Music Files

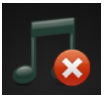
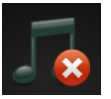
*.MP3
Bit rate range 32 Kbps to 320 Kbps

- Sampling rate MPEG1 Layer3: 32 kHz, 44.1 kHz, 48 kHz
- Sampling rate MPEG2 Layer3: 16 kHz, 22.05 kHz, 24 kHz

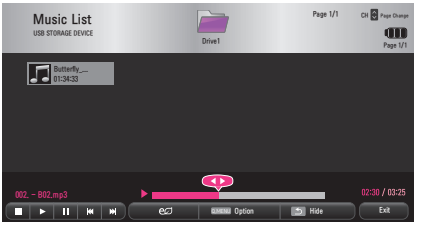
Browsing Music List

1. Connect a USB device.
2. Press the **SETTINGS** button.
3. Move to **MY MEDIA**.
4. Use the <, or > button to select **Music List** and press the **OK** button.
5. Use the ∧, ∨, <, or > button to select the file you want and press the **OK** button.



No.	Description	
❶	Thumbnails	
	Abnormal file	
	File not supported	
❷	File List	
❸	Moves to the upper level folder.	
❹	Current page/Total no. of folder pages	
❺	Displays the remaining battery life.	
❻	Current page/Total no. of file pages	
❼	Moves to the top level folder.	
❽	Moves to the upper level folder.	

6 Control playback by using the following buttons.



Item	Description
◀▶	Changes the playing position.
■	Stops playing.
▶	Returns to normal playback.

Item	Description
⏸	Pauses the media player.
⏮ ⏭	Plays the previous/next file.
eco	You can use the **Energy Saving** mode.
Option	Sets up the options of Music List.
Hide	Hides the playback bar. • Press the **OK** button to make the playback bar appear.
Exit	Returns to the Music List screen.

Options for Music List

1 Press the **Q.MENU** button.

2 Use the ∧ or ∨ button to move to a desired option and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up each item.

Set Audio Play.

Item	Description
Repeat	Selects repeat play.
Random	Selects random play.

Set Audio.

You can change audio settings. (Refer to "AUDIO Settings" on page 65.)

Viewing Files

You can see document files stored on a connected device.

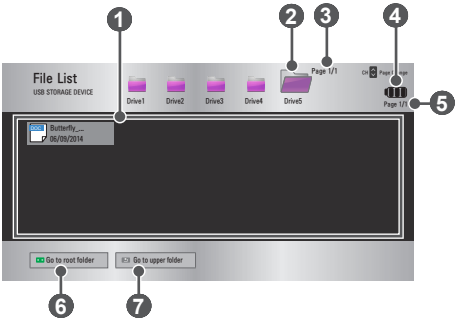
Supported File Formats

XLS, XLSX, DOC, DOCX, PPT, PPTX, TXT, PDF, HWP
Microsoft Office: 97/2000/2002/2003/2007 Version
Adobe PDF: 1.0/1.1/1.2/1.3/ 1.4 Version
Hangul: 97/2003/2007 Version

- File Viewer realigns a document, so it may look different from what is displayed on a PC.
- For documents that include images, the resolution may look lower during the realigning process.
- If the document is large or has many pages, it may take longer to load.
- Unsupported fonts may be replaced by other fonts.
- The file viewer may not open for Office documents that contain many high resolution images. In that case, reduce the image file size, save it on a USB storage device and run the file viewer again or connect your PC to the projector and open the file on your PC.

Browsing File List

1. Connect a USB device.
2. Press the **SETTINGS** button.
3. Move to **MY MEDIA**.
4. Use the <, or > button to select **File List** and press the **OK** button.
5. Use the ∧, ∨, <, or > button to select the file you want and press the **OK** button.

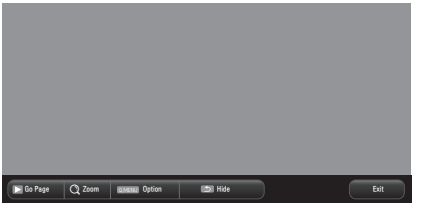


No.	Description
1	File List
2	Moves to the upper level folder.
3	Current page/Total no. of folder pages
4	Displays the remaining battery life.
5	Current page/Total no. of file pages
6	Moves to the top level folder.
7	Moves to the upper level folder.

6 Control playback by using the following buttons.

- Click **Go Page** then the pop-up window for selecting the number of page appears. Input the page to move to the page you want.
- Press the **VOLUME +, -** button to zoom in or zoom out.

Press the **OK** button and then use the **Up/Down/Left/Right** buttons to move to **Go Page** or **Zoom**.



Item	Description
Go Page	Moves to the page you want. Use the **Up/Down/Left/Right** buttons to select a page and press the **OK** button.
Zoom	Enlarges or reduces the document.
Option	Sets up the options of File Viewer.
Hide	Hides the menu. • Press the **OK** button to make it appear.
Exit	Returns to the File Viewer screen.

Options for File List

1 Press the **Q.MENU** button.
2 Use the ∧, ∨, <, or > button to set up each item.

Set FileViewer Option

Item	Description	
Single Page Loading	**On**	Loads and displays pages one by one. The initial loading time is short but a content heavy page may be displayed slowly.
	Off	Loads all pages of a file to memory before it starts to display them. The initial loading time is long but you can navigate pages quickly after loading is complete. If a file is too large, it may fail to load all the pages.
Image Quality	You can set the quality of the image included in the document. The following three options are available for the image quality: High, Medium, Low. Higher the image quality, lower the display time.	
Document Align	Selects initial document align method.	

File View settings are default, so close the currently opened document to apply changes to the new document, if any.

CUSTOMIZING SETTINGS

SETTINGS

1 Press the **SETTINGS** button.

2 Use the ∧, ∨, <, or > button to select the desired item and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.

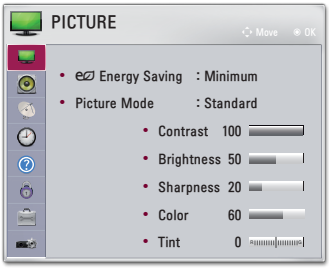
Menu	Description
PICTURE	Adjusts the image quality for optimal viewing.
AUDIO	Adjusts the sound quality and volume level.
CHANNEL	Sets up and edits a channel.
TIME	Sets the time and time-related features.
INFORMATION	Shows information about the Projector.
LOCK	Locks or unlocks a channels or a programs.
OPTION 1	Customizes the general settings.
OPTION 2	Customizes the settings related the projector.
INPUT	Selects the desired input source.
MY MEDIA	Accesses photo, music, movie, and document files.

PICTURE Settings

1 Press the **SETTINGS** button.

2 Use the ∧, ∨, <, or > buttons to select **PICTURE** and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.
   – To return to the previous menu, press the ↩ button.



The available picture settings are described as follows.

Menu	Description	
Energy Saving	Reduces power consumption by adjusting peak screen brightness.	
	Mode	
	Minimum/ Medium/ Maximum	Applies the pre-set **Energy Saving** mode.

Menu	Description	
Picture Mode	Selects the picture mode optimized for the viewing environment or the program. You can also customize advanced options for each mode.	
	Mode	
	Vivid	Maximizes the visual effect of video. Heightens contrast, brightness and sharpness to display vivid images.
	Standard	Displays images in standard levels of contrast, brightness and sharpness.
	Cinema	Optimizes the image for a movie.
	Sport	Optimizes the image for sports by emphasizing primary colors and dynamic actions.
	Game	Optimizes the image for playing games on fast-moving screens.
	Expert1 / Expert2	Menu for adjusting picture quality that allows experts and amateurs to enjoy the best Projector viewing. – **Expert** mode is for picture tuning professionals to control and fine-tune using a specific image. For normal images, the effects may not be dramatic.
Contrast	Adjusts the difference between bright and dark regions of the screen.	
Brightness	Adjusts the overall screen brightness.	
Sharpness	Adjusts the sharpness of the borders between bright and dark. Horizontal and Vertical Sharpness are available only in **Expert1 / Expert2**.	
Color	Adjusts the intensity of all colors.	
Tint	Adjusts the balance between red and green levels.	
Advanced Control	Customizes the advanced settings.	
Picture Option	Sets optional settings.	

Menu	Description
Picture Reset	Resets values customized by the user. Each picture mode is reset. Select the picture mode you wish to reset.
Aspect Ratio	Resizes the picture.

Advanced Control

Menu	Description
Dynamic Contrast	Adjusts contrast and color to the optimal level according to the screen's brightness.
Dynamic Color	Adjusts colors for more natural-looking colors.
Color Gamut	Selects the range of colors that can be expressed. • **Standard**: Displays the original colors of an input signal regardless of the display features. • **Wide**: Makes use of the display's rich colors.
Skin Color	Skin color spectrum can be separately set to implement the skin color as defined by the user.
Sky Color	Sky color is set separately.
Grass Color	Natural color spectrum (meadows, hills, etc.) can be separately set.
Gamma	Sets the gradation curve according to the output of the picture signal in relation to the input signal.

* Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.

Expert Control

Menu	Description
Dynamic Contrast	Adjusts contrast and color to the optimal level according to the screen's brightness.
Color Gamut	Selects the range of colors that can be expressed. • **Standard**: Displays the original colors of an input signal regardless of the display features. • **Wide**: Makes use of the display's rich colors.
Edge Enhancer	Shows clearer and distinctive yet natural edges of the video.
Expert Pattern	Patterns used for expert adjustment.
Color Filter	Filters a specific color spectrum in RGB colors to fine-tune color saturation and hue accurately.
Color Temperature	In **Expert** mode, you can customize the options of each mode.
	Gamma: Select **1.9**, **2.2**,or **2.4**. **a. Method: 2 Points** – **Pattern**: **Inner, Outer** – **Points: Low, High** – **Red/Green/Blue**: The adjustment range for each color is from **-50** to **+50**. – **Apply to all inputs**: The values of the **Color Temperature** is applied to all the input modes. **b. Method: 20 Point IRE** – **Pattern: Inner, Outer** – **IRE (Institute of Radio Engineers)** is the unit indicating the size of a video signal and can be set to **5**,**10**,**15**, ... **100**. You can fine-tune for each setting as shown below. – **Luminance**: The adjustment range is **50** to **500**. – **Red/Green/Blue**: The adjustment range is **-50** to **+50**. – **Apply to all inputs**: The values of the **Color Temperature** is applied to all the input modes.

Menu	Description
Color Management System	Adjusts Red/Green/Blue/Cyan/Magenta/Yellow colors. Allows an expert to adjust the tint using a test pattern. Six colors (Red/Green/Blue/Cyan/Magenta/Yellow) can be selectively adjusted without affecting other colors. You may not see colors change on a normal picture even after adjustment. – **Saturation Red/Green/Blue/Yellow/Cyan/Magenta,** **Tint Red/Green/Blue/Yellow/Cyan/Magenta,** **Luminance Red/Green/Blue/Yellow/Cyan/Magenta**: The adjustment range is **-30** to **+30** each.

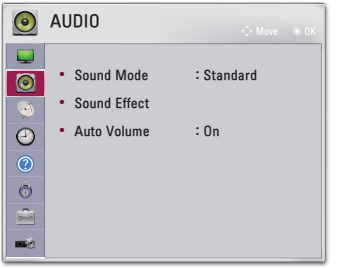
* Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.

Picture Option

Menu	Description
Noise Reduction	Reduces screen noise in the video.
MPEG Noise Reduction	Eliminates noise generated while creating digital picture signals.
Black Level	Adjusts the brightness or darkness of the screen to suit the black level of the picture input using the degree of darkness (black level) of the screen.
Real Cinema	Optimizes the screen for movie viewing.
Color Temperature	Adjusts the overall color of the screen to suit your preference. Select **Warm**, **Natural**, **Cool** or **Medium**.

AUDIO Settings

1 Press the **SETTINGS** button.
2 Use the ∧, ∨, <, or > button to select **AUDIO** and press the **OK** button.
3 Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.
– To return to the previous menu, press the ↩ button.



The available audio settings are described as follows.

Menu	Description	
Sound Mode	Sets the sound mode.	
	Mode	
	Standard	Suitable for all types of video.
	News / Music / Cinema / Sport / Game	Sets audio optimized for a specific genre.

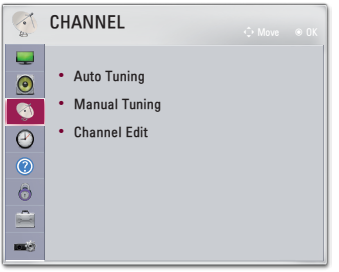
<table>
<tr><th>Menu</th><th colspan="2">Description</th></tr>
<tr><td rowspan="6">Sound Effect</td><td colspan="2">The user can select various sound effects.</td></tr>
<tr><td colspan="2">Mode</td></tr>
<tr><td>Clear Voice II</td><td>Makes the voice from the projector crisp and clear.</td></tr>
<tr><td>Virtual Surround</td><td>LG’s proprietary audio processing technology allows 5 channel-like surround sound from two speakers.
• When Clear Voice II is set to on, Virtual Surround cannot be selected.</td></tr>
<tr><td>Equalizer</td><td>Adjusts the volume to a level of your choice using the Equalizer.
• Audio-band (100 Hz/ 300 Hz/ 1 kHz/ 3 kHz/ 10 kHz) can be adjusted from -10 to 10.
• Reset: Resets voice options that the user has changed.</td></tr>
<tr><td>Balance</td><td>Adjusts the balance of the left and right speakers.</td></tr>
<tr><td>Reset</td><td>Initialize the applied effect under the Sound Effect menu.</td></tr>
<tr><td>Auto Volume</td><td colspan="2">Automatically adjusts the volume level.</td></tr>
</table>

CHANNEL Settings

1 Press the **SETTINGS** button.

2 Use the ∧, ∨, <, or > button to select **CHANNEL** and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.
   – To return to the previous menu, press the ↩ button.



The available channel settings are described below.

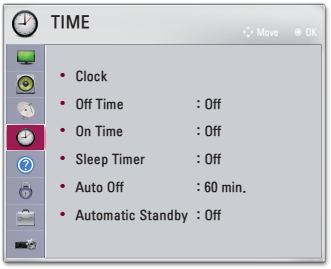
Menu	Description
Auto Tuning	Remembers a channel which is currently broadcasting. You should use this function when you move to another house or move the Projector to other place. It must be used while the antenna is connected and there are channel broadcasting signals. • Channels are not registered properly unless the antenna/ cable is connected correctly. • **Auto Tuning** only finds programs that are currently broadcasting. • If **Lock System** is turned on, a pop-up window will appear asking for password.
Manual Tuning	Adjusts programs manually and saves the results. For digital broadcasting, signal strength and signal quality can be checked.
Channel Edit	Edits the saved programs. Set as favorite program, block/unblock program, skip program etc. of the selected program.

TIME Settings

1 Press the **SETTINGS** button.

2 Use the ∧, ∨, <, or > button to select **TIME** and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.
   – To return to the previous menu, press the ↩ button.



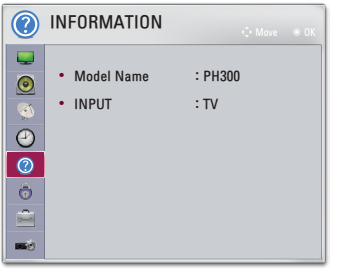
The available time settings are described as follows.

Menu	Description
Clock	Sets the time, date, or timer feature.
Off Time/ On Time	Sets the time to turn on or off the projector automatically. To use this feature, you should set the current time and date in advance. To use this feature, set the time correctly. If you do not want to set **Off Time/On Time**, select **Off** in **Repeat**. **NOTE** • If you set both **Off time** and **On time** features to the same time, the Off time feature overrides the On time feature. • If you do not press any button within two hours after the projector is turned on by the **On Time** feature, the projector enters standby mode automatically.
Sleep Timer	Turns off the Projector after a preset number of minutes. To cancel the **Sleep Timer**, select **Off**.
Auto Off	If there is no signal, the projector automatically turns off after the preset time has elapsed.
Automatic Standby	Turns off the projector automatically after a set period of time if there is no button input on the projector.

INFORMATION

1 Press the **SETTINGS** button.

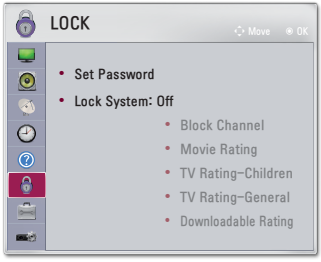
2 Use the ∧, ∨, <, or > button to select **INFORMATION** and press the **OK** button.



The following are INFORMATION-related items.

Menu	Description
Model Name	Shows the model name of the product.
INPUT	Shows the current status of inputs.

LOCK Settings



1. Press the **SETTINGS** button.
2. Use the ∧, ∨, <, or > button to select **LOCK** and press the **OK** button.
   – Enter the preset password to enter the **LOCK** settings. The initial password is **0000.**
3. Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.
   – To return to the previous menu, press the ↩ button.

The available lock settings are described below.

Menu	Description	
Set Password	Sets or changes projector password. • The initial password is set as **0000**.	
Lock System	Locks the selected channel or external input. First, set **Lock System** to **On**.	
	Item	
	Block Channel	Blocks the programs that contain inappropriate contents for children. The programs can be selected but the screen is blank and the audio is muted. To watch a locked program, enter the password.

Menu	Description	
	Item	
Lock System	Movie Rating	Blocks the movies that are only broadcasted on the TV and contain inappropriate contents, based on the Motion Picture Association of America (MPAA) rating. • **G** (General audiences) All ages admitted • **PG** (Parental guidance suggested) Some material may not be suitable for children • **PG-13** (Patents strongly cautioned) Some material may be inappropriate for children under 13 • **R** (Restricted) Under 17 requires accompanying parent or adult guardian • **NC-17** No one 17 and under admitted. • **X** Adults only
	TV Rating-Children	Blocks the children's TV programs that parents do not want their children to watch. To block other TV programs, you should set the TV Rating-General feature. • **Age** TV-Y (All children, including children from ages 2-6), TV-Y7 (Directed to older children, suitable for children age 6 and above) • **Fantasy Violence** TY-Y7 (Directed to older children - Fantasy violence, suitable for children age 6 and above, containing more intense or combative fantasy violence)

Menu	Description	
Lock System	TV Rating-General	Blocks the TV programs that you want based on the ratings by using the Parental Control Function (V-Chip). The V-Chip electronically reads TV program ratings and allows parents to block program that are unsuitable for children. • **Age** TV-G (General audience, suitable for all ages) TV-PG (Parental guidance suggested, containing material that are unsuitable for younger children) TV-14 (Parents strongly cautioned, containing material that are unsuitable for children age 14 and under) TV-MA (Mature audience only, unsuitable for children age • **Dialog** (suggestive dialogue) TV-PG or TV-14 • **Language** (coarse language)TV-PG, TV-14, or TV-MA • **Sex** (sexual situation) TV-PG, TV-14, or TV-MA • **Violence** TV-PG, TV-14, or TV-MA
	Downloadable Rating	This function operates only when TV has received Region5 Rating data. The name of the rating option may differ.
	Input Block	Block the input sources.

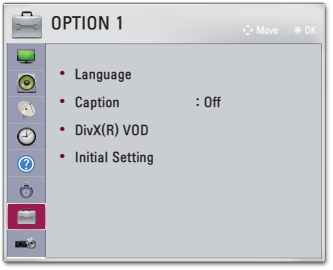
Menu	Description
Key Lock	Locks control buttons on projector. • Key Lock function remains intact even in case of power outage or when the power cord is removed from the wall socket. • Key Lock function can only be set by remote control, and not by the button on the projector. • If you select **On**: You can turn the projector on only with the Power button if you have turned the projector off using the remote control. If you press a button on the control panel while watching video, the message "**Key Lock**" is displayed.

OPTION 1 Settings

1 Press the **SETTINGS** button.

2 Use the ∧, ∨, <, or > button to select **OPTION 1** and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.
   – To return to the previous menu, press the ↩ button.



The available option 1 settings are described as follows.

Menu	Description	
Language	Selects a desired Menu Language.	
Caption	View subtitles when the TV station provides subtitled programing. Program subtitles work only on digital/ analog broadcasts. Change Caption to **On** and select caption setting.	
	Mode	**CC 1-4** (Closed Captioning) / **Text 1-4** Displays the audio portion of a TV program as text on the TV screen. **CC 1** is the most common mode in use. Field 1 data channels: two Captions (**CC 1**, **CC 2**), two Text (**Text 1**, **Text 2**). Field 2 data channels: two Captions (**CC 3**, **CC 4**), two Text (**Text 3**, **Text 4**). **Service1-6** This is only available for the digital broadcasting system.

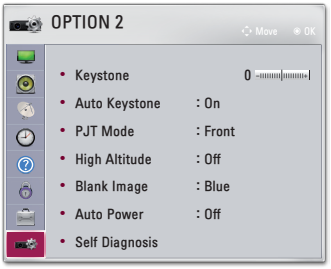
<table>
<tr><th>Menu</th><th colspan="3">Description</th></tr>
<tr><td rowspan="9">Caption</td><td rowspan="9">Digital Option</td><td colspan="2">Set up the size and color of the subtitles on Digital Option. Please select Set by Program or Custom.
Select Custom to adjust minute options such as the subtitles' size and color.</td></tr>
<tr><td colspan="2">Item</td></tr>
<tr><td>Size</td><td>Selects the wordsize.</td></tr>
<tr><td>Font</td><td>Selects a typeface for the text.</td></tr>
<tr><td>Text Color</td><td>Selects a color for the text.</td></tr>
<tr><td>Text Opacity</td><td>Adjusts the opacity for the text color.</td></tr>
<tr><td>Bg Color</td><td>Selects a color for the background color.</td></tr>
<tr><td>Bg Opacity</td><td>Adjusts the opacity for the background color.</td></tr>
<tr><td>Edge Type</td><td>Selects an edge type.</td></tr>
<tr><td>Edge Color</td><td>Selects a color for the edges.</td></tr>
<tr><td>DivX(R) VOD</td><td colspan="3">Sets DivX related settings.</td></tr>
<tr><td>Initial Setting</td><td colspan="3">Deletes all optional settings and returns to initial default mode. Once initialization is complete, the projector will turn off and on by itself.
• If Lock System is activated, a pop-up password prompt will appear.
• Do not turn off the power during initialization.</td></tr>
</table>

OPTION 2 Settings

1 Press the **SETTINGS** button.

2 Use the ∧, ∨, <, or > button to select **OPTION 2** and press the **OK** button.

3 Use the ∧, ∨, <, or > button to set up the desired item and press the **OK** button.
   – To return to the previous menu, press the ↩ button.



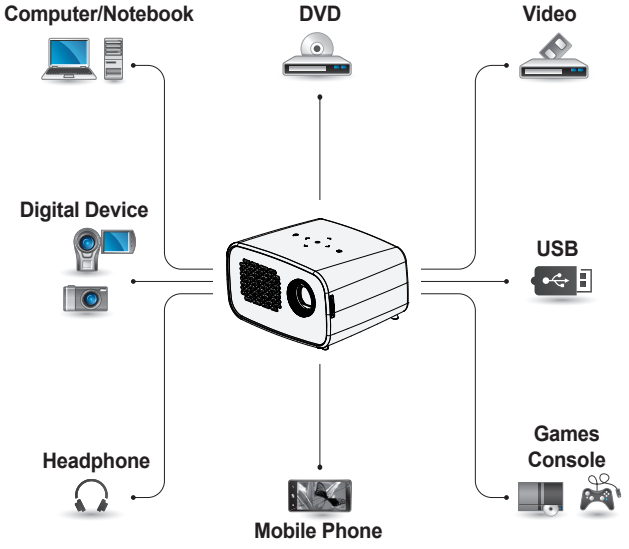
The settings for OPTION 2 are described as follows.

Menu	Description	
Keystone	To prevent the screen image from becoming trapezoidal, Keystone adjusts the top and bottom width of the image if the projector is not set at a right angle to the screen.	
Auto Keystone	**Auto Keystone** provides a rectangular screen image by automatically adjusting the Keystone number when there is a trapezoidal screen image caused by tilting of the projector.	
	Item	
	On	Automatically adjusts the Keystone number.
	Off	Manually adjusts the Keystone number.
PJT Mode	This function turns the projected image upside down or flips horizontal. • Select **Rear** when projecting from the back of the transparent screen purchased separately. • Select **Front Ceiling** when installing the product on the ceiling. • When the **PJT Mode** is **Rear Ceiling/Front Ceiling**, the left/right of the speaker changes automatically.	

Menu	Description	
High Altitude	If the projector is used at an altitude higher than 1200 meters, turn this on. Otherwise, the projector may overheat or its protection function may be activated. If this happens, turn the projector off and then on again after waiting for several minutes.	
Blank Image	Selects a background for blank Image.	
Auto Power	Makes the projector turn on automatically when the adaptor plug is inserted.	
	Item	
	On	When the AC/DC plug is connected to the projector, it turns on automatically.
	Off	When the AC/DC plug is connected to the projector, it goes into standby mode.
Self Diagnosis	Troubleshoots functional problems that can arise while using the product.	

CONNECTING DEVICES

You can connect various external devices to the projector.



HDMI - 79 Page
USB Device - 39 Page
Headphone - 80 Page
Mobile Phone (MHL/Slimport) - 81 Page

Connecting HD Receiver, DVD Player, or VCR Player

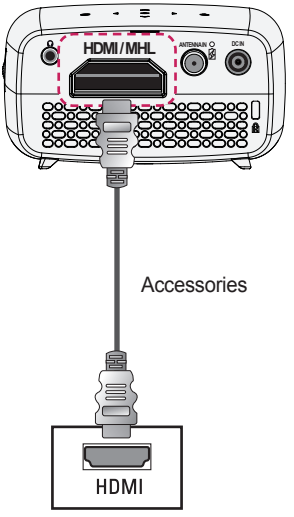
You can use various features after connecting a HD receiver, DVD player,VCR player, PC, laptop, etc. to the projector with an HDMI cable.

HDMI Connection

With an HDMI cable, you can enjoy high quality picture and sound.

Using a HDMI cable, connect the **HDMI/MHL** port of the projector to the HDMI output port of the device to connect. Both video and audio are output at the same time.

Press the **INPUT** button on the remote control and select **HDMI**.

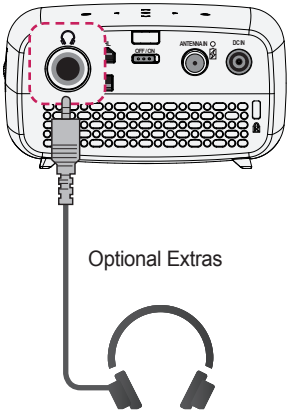


The table below shows examples of switching the output. For more information, refer to the "External Output", "Connecting to an External Monitor", or similar sections of the owner's manual of your computer.

Brand	Switching Output
NEC	[Fn]+[F3]
Panasonic	[Fn]+[F3]
Toshiba	[Fn]+[F5]
IBM	[Fn]+[F7]
Sony	[Fn]+[F7]
Fujitsu	[Fn]+[F10]
LG	[Fn]+[F7]
Samsung	[Fn]+[F4]
Macintosh	Adjust the control panel to enable mirroring after start-up.

Connecting Headphones

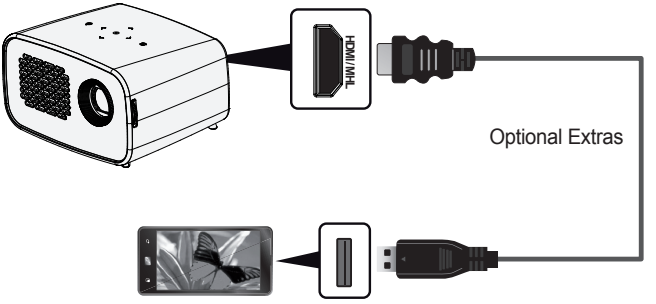
You can listen to the audio through a headphone.



Using the Mirroring Function of a Mobile Phone

MHL/Slimport Connection

You must use a HDMI adapter to connect your cell phone to the projector and to output images and sound from your cell phone to the projector. The compatible HDMI adapters are different, depending upon your cell phone type. Therefore, purchase an appropriate MHL or Slimport adapter. (To find out whether your device is MHL/Slimport-certified, please contact your device manufacturer.)



NOTE

- When you connect a mobile phone to the **HDMI/MHL** port, you can see the mobile phone screen through a projector.
  - This only applies to mobile phones that support MHL/Slimport.
  - You can use the remote control for some applications. (However, ▶, ■, ❚❚, ◀◀, and ▶▶ buttons on the remote control are disabled.)
- Disconnect the MHL/Slimport cable from the projector when:
  - The MHL/Slimport function is disabled.
  - Your mobile device is fully charged in standby mode.

MAINTENANCE

Clean your Projector to keep it in optimal condition.

Cleaning

Cleaning the Lens

If there is any dust or staining on the lens surface, you must clean the lens.
Use an air spray or a cleaning cloth to clean the lens.
To remove dust or stains, use an air spray or apply a small amount of cleaning agent onto a swab or soft cloth to lightly rub the lens.
Please be aware that liquid may flow into the lens if the product is sprayed directly onto the lens.

Cleaning the Projector Case

To clean the projector case, first unplug the power cord.
To remove dust or stains, use only a dry, lint-free, nonabrasive cloth to polish the lens.
Do not use alcohol, benzene, thinners, or other chemicals, which may damage the case.

SPECIFICATIONS

MODELS	PH300 (PH300-NA) / PH300W (PH300W-NA)
Resolution (Pixel)	1280 (Horizontal) × 720 (Vertical)
Aspect Ratio	16:9 (Horizontal:Vertical)
Projection Distance (Video size)	0.74 m to 3.76 m (50.8 cm to 254 cm)
Ratio of Upward Projection	100 %
Working range of the remote control	3 m
AC-DC Adaptor	19 V ⎓, 2.1 A (Adaptor Input 100-240 V @ 50/60 Hz)
Audio Output	1 W + 1 W
Reception type	DTV-ATSC/TV-NTSC
Reception channels	VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135
External Antenna Impedance	75 Ω (VHF/ UHF)
Height (mm)	63.9 (front)/54.5 (rear), 65.9 (with foot)
Width (mm)	113.6
Depth (mm)	85.5
Weight (g)	430
USB Device	5 V, 0.5 A (max.)
Power	AC 100 to 240 V, 50 Hz/60 Hz

Operation environment	**Temperature**	
	Operation	0 °C to 40 °C
	Storage	-20 °C to 60 °C
	Relative humidity	
	Operation	0 % to 80 %
	Storage	0 % to 85 %

* Contents in this manual may be changed without prior notice due to upgrade of product functions.

Supported HDMI (PC) Modes

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 350	31.468	70.09
640 x 480	31.469	59.94
720 x 400	31.469	70.08
800 x 600	37.879	60.31
1024 x 768	48.363	60.00
1152 x 864	54.348	60.053
1280 x 800	49.68	60
1280 x 1024	63.981	60.02
1360 x 768	47.712	60.015
1400 x 1050	65.317	59.979
1680 x 1050	65.3	60

- If an invalid signal is input into the projector, it will not be displayed properly on the screen or a message such as **No Signal** or **Invalid Format** will be displayed.
- The projector supports the DDC1/2B type as the Plug & Play function (Auto-recognition of PC monitor).

Supported HDMI/DVI-DTV Mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
480p	31.47 31.47 31.50	60 59.94 60
576p	31.25	50
720p	45.00 44.96 37.5	60.00 59.94 50
1080i	33.75 33.72 28.125	60 59.94 50
1080p	67.500 67.432 27.000 26.97 33.75 33.71 56.25	60 59.939 24.000 23.976 30.000 29.97 50

- To provide the best picture quality, a 1280 x 720 (720p) resolution is recommended.

Open Source Software Information

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product,
please visit http://opensource.lge.com.
In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.
LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

LG
Life's Good